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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/715,681	11/17/2000	Yoav Raz	EMS-00202	4765

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PATENT GROUP  
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BOSTON, MA 02109

EXAMINER

DADA, BEEMNET W

ART UNIT	PAPER NUMBER
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2135

DATE MAILED: 04/22/2004

5

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/715,681

Applicant(s)

RAZ ET AL.

Examiner

Beemnet W Dada

Art Unit

2135

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 November 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-62 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-62 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 2 & 3.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

**DETAILED ACTION**

1. Claims 1-62 have been examined.

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-4, 8-12, 14-25, 29-33, 35-44, 46-57 and 59-62 are rejected under 35 U.S.C. 102(e) as being anticipated by Waldin et al. (Hereinafter refereed to as Waldin) (U.S. Patent No. 6,094,731).

4. As per claim 1, Waldin teaches a method of scanning a storage device for viruses, comprising:

determining physical portions of the storage device that have been modified since a previous virus scan [column 2, lines 57-64 and column 6, lines 37-47]; and

Scanning at least parts of the physical portions for viruses [column 6, lines 43-46 and column 7, lines 37-46].

5. As per claim 8, Waldin teaches a method of scanning a storage device for viruses, comprising:

determining physical portions of the storage device that have been modified since a previous virus scan [column 2, lines 57-64 and column 6, lines 37-47];

mapping the portions to logical entities (i.e. mapping sectors to files) [column 4, lines 4-5]; and

scanning at least some of the logical entities for viruses [column 6, lines 43-46 and column 7, lines 37-46].

6. As per claim 41, Waldin teaches an antivirus unit comprising:

means for coupling to at least one storage device [column 3, lines 47-55];

means for determining physical portions of the storage device that have been modified since a previous virus scan [column 2, lines 57-64 and column 6, lines 37-47]; and

means for scanning at least parts of the physical portions for viruses [column 6, lines 43-46 and column 7, lines 37-46].

7. As per claims 2, 9 and 42, Waldin teaches the method as applied to claims 1, 8 and 41 above. Furthermore, Waldin teaches the method, wherein the physical portions correspond to tracks (sectors) of the storage device [column 4, lines 4-8 and figure 1].

8. As per claims 3, 10 and 43, Waldin teaches teaches the method as applied to claims 1, 8 and 41 above. Furthermore, Waldin teaches the method, wherein the physical portions correspond to sectors of the storage device [column 4, lines 4-8 and figure 1].

9. As per claims 4, 11 and 44, Waldin teaches the method as applied to claims 1, 8 and 41 above. Furthermore, Waldin teaches the method, wherein the physical portions correspond to sub-portions of the storage device [column 4, lines 4-8 and figure 1].

10. As per claim 12, Waldin teaches the method as applied to claim 8 above. Furthermore, Waldin teaches the method, wherein the logical entities are files [column 4, lines 4-5].

11. As per claims 14 and 15, Waldin teaches the method as applied to claim 8 above. Furthermore, Waldin teaches the method further comprising:

Prior to scanning the logical entities, selecting the logical entities according to at least one predetermined criterion (i.e. date of last modification) [column 6, lines 25-30].

12. As per claims 16 and 17, Waldin teaches the method as applied to claim 8 above. Furthermore, Waldin teaches the method, wherein scanning the logical entities includes scanning logical entities having one of a predetermined set of types (i.e. web based interpreted/executed files) [column 5, lines 50-65 and column 6, lines 1-15].

13. As per claim 18, Waldin teaches the method as applied to claim 8 above. Furthermore, Waldin teaches the method, wherein scanning the logical entities includes scanning entities having a date of last modification that is after a most previous virus scan [column 4, lines 62-67 and column 6, lines 25-30].

14. As per claim 19, Waldin teaches the method as applied to claim 8 above. Furthermore, Waldin teaches the method, wherein scanning the logical entities includes scanning entities having one of a predetermined set of types (i.e. web based interpreted/executed files) [column 5, lines 50-65 and column 6, lines 1-15] and having a date of last modification that is after a most previous virus scan [column 4, lines 62-67 and column 6, lines 25-30].

15. As per claims 20 and 21, Waldin teaches the method as applied to claim 8 above. Furthermore, Waldin teaches the method, wherein scanning the logical entities includes:

for each of the logical entities having a predetermined set of types [column 5, lines 50-65 and column 6, lines 1-15], and having a date of last modification that is prior to a most previous virus scan [column 4, lines 62-67 and column 6, lines 25-30], comparing a current size value of the entity with a previous size value of the entity prior to the most previous scan [column 6, lines 18-25]; and

scanning entities having at least one of: a date of last modification that is after a most previous virus scan and the current size value that is different than the previous size value [column 6, lines 18-30].

16. As per claims 46, 51 and 52 Waldin teaches the method as applied to claim 41 above. Furthermore, Waldin teaches the method, wherein said means for coupling includes means for coupling to only one storage device [column 3, lines 47-55].

17. As per claims 47-50, Waldin teaches the method as applied to claim 41 above. Furthermore, Waldin teaches the method, wherein said means for coupling includes means for coupling to more than one storage device [column 8, lines 20-30].

18. As per claims 22-25, the claimed steps correspond to the functions of the elements of the method claims 1-4, which has been rejected above and thus rejected with the same reason applied thereto.

19. As per claims 29-33 and 35-39, the claimed steps correspond to the functions of the elements of the method claims 8-12 and 14-19, which has been rejected above and thus rejected with the same reason applied thereto.

20. As per claims 53-57 and 59-62, the claimed steps correspond to the functions of the elements of the method claims 8-12 and 14-17, which has been rejected above and thus rejected with the same reason applied thereto.

### ***Claim Rejections - 35 USC § 103***

21. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

22. Claims 5-7, 13, 26-28, 34, 45, and 58 are rejected under 35 U.S.C. 103(a) as being unpatentable over Waldin et al. (U.S. Patent No. 6,094,731).

23. As per claims 5, 13 and 45, Waldin teaches the method as applied to claims 1, 8 and 41 above. Furthermore, Waldin teaches creating a table that is indexed according to each of the portions [fig 1, unit 10 and column 4, lines 4-8]. Waldin also teaches scanning for viruses when it has been determined that portions have been modified [column 4, lines 9-12], and calculating a new hash value upon determination of a modification [column 4, lines 58-60]. However Waldin does not explicitly teach setting a specific one of entries subject to a write operation. It would have been obvious to one having ordinary skill in the art at the time the invention was made to include a method of setting a specific one of entries subject to a write operation. This would have been obvious because Waldin teaches placing identification numbers into sectors that is scanned, every time a sector is read [column 4, lines 52-58]. Based on this teachings it would have been obvious to one having ordinary skill in the art at the time the invention was made to include a method of setting a specific one of entries subject to a write operation into the indexed sector table thought by Waldin.

24. As per claims 6 and 7, Waldin teaches the method as applied to claim 5 above. Furthermore Waldin teaches method, wherein creating the table includes copying another table provided by the storage device [column 3, lines 50-55, figure 1, originating and recipient computers].

25. As per claims 26-28, the claimed steps correspond to the functions of the elements of the method claims 5-7, which has been rejected above and thus rejected with the same reason applied thereto.



26. As per claims 34 and 58, the claimed steps correspond to the functions of the elements of the method claim 13, which has been rejected above and thus rejected with the same reason applied thereto.

### ***Conclusion***

27. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a) U.S. Patent No. 5,473,769 to Cozza.
- b) U.S. Patent No. 6,611,925 B1 to Spear
- c) U.S. Patent No. 6,021,510 to Nachenberg
- d) U.S. Patent No. 5,502,815 to Cozza

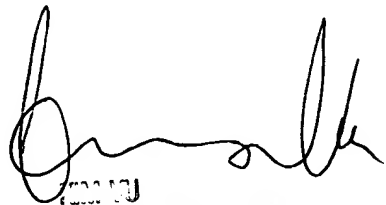
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Beemnet W Dada whose telephone number is (703) 305-8895. The examiner can normally be reached on Monday - Friday (8:30 am - 6:00 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Y Vu can be reached on (703) 305-4393. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Beemnet Dada

April 14, 2004



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